





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re Application of:**

Zvi SIDELMAN

Serial No.: 09/942,121

Filed: August 30, 2001

For: Casein Derived Peptides And Uses Thereof In Therapy

Examiner: Samuel W. Liu, Ph.D.

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Group Art Unit: 1653

Attorney Docket: 01/22453

Commissioner for Patents  
POBox 1450  
Alexandria VA23313-1450

## RESPONSE

Sir:

This is a response to the United States Patent and Trademark Office Action mailed June 30, 2005, which response is made on or before November 30, 2005, and for which a two month extension fee is due, and enclosed herewith. Applicant submits this response for entry into the record, in which:

**Amendments to the claims begin on page 2.**

**Remarks begin on page 39.**

Please amend the above-identified application as follows:

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**In the specification:**

**Please replace the paragraph beginning at page 21, line 16, and ending at page 21, line 30, with the following amended paragraph:**

-- FIGs. 3a-c depict the stimulation of proliferation of Natural Killer (NK) and T-lymphocyte (T) cells from cultured human Peripheral Blood Stem Cells (PBSC) by peptides derived from natural casein. NK and T cell proliferation in cultured PBSC from Granulocyte Colony Stimulating Factor treated donors incubated with or without peptides derived from natural casein is expressed as the percentage (%) of cells binding the anti-CD3/Fluorescein isothiocyanate (FITC) fluorescent anti-T cell antibody UCHT<sub>1</sub>, or the anti CD56/R-phycoerythrin (RPE) fluorescent anti-NK cell antibody MOC-1 (DAKO A/S Denmark). Controls are FITC and RPE-conjugated anti-mouse IgG antibody. Figure 3a represents the percentage of cultured human PBSC binding fluorescent antibody CD56 (5 independent samples) after 10 days incubation with (peptides) or without (control) 100 µg per ml peptides derived from natural casein. Figure 3b represents the percentage of cultured human PBSC cells binding fluorescent anti-CD3 (T cell) antibody, following 14 days of incubation with (peptides) or without (control) 100 µg per ml peptides derived from natural casein. Figure 3c represents the percentage of cultured human PBSC cells binding fluorescent anti-CD3 (T cell) antibody and cells binding both CD3 and CD56 (T and NK-like cells) antibodies after 28 days incubation with (peptides) or without (control) 100 µg per ml peptides derived from natural casein. -

**Please replace the paragraph beginning at page 62, line 5, and ending at page 62, line 16, with the following amended paragraph:**

-- *Proliferation of megakaryocytes in multipotential colonies (CFU-GEMM) from murine Bone Marrow cells:* Primary bone marrow cells ( $1 \times 10^5$  per ml) from 8-12 week-old C3H/HeJ mice were grown in serum-free methyl cellulose-IMDM medium for 8-9 days at 5 % CO<sub>2</sub>, 95 % air, at 37 °C. The medium, appropriate for the growth of multipotential colonies (CFU-GEMM), contained 1 % Bovine Serum Albumin (BSA) (Sigma),  $10^{-4}$  M thioglycerol (Sigma),  $2.8 \times 10^{-4}$  M human transferrin (TF,

Biological industries, Israel), 10 % WEHI-CM as a source of IL-3 and 2 units per ml erythropoietin (rhEPO, R & D Systems, Minneapolis). Colonies were scored after 8-9 days using an Olympus dark field microscope. They were picked with a micropipette, cytocentrifuged and stained with May-Grunwald-Giemsa for differential counts. At least 700 cells were counted for each preparation. --